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EXAMINER	
BARTON, JEFFREY THOMAS	
ART UNIT	PAPER NUMBER
1753	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/845,784	ALLY ET AL.	
	Examiner	Art Unit	
	Jeffrey T. Barton	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 29 December 2004 does not place the application in condition for allowance.

Status of Objections and Rejections Pending Since the Office Action of 29 September 2004

2. All prior rejections made under 35 U.S.C. §112, 102, and 103 are withdrawn due to Applicants' amendment.

3. All rejections made under the judicially-created doctrine of obviousness-type double patenting are withdrawn due to Applicants' amendment.

4. New grounds of rejection, which were necessitated by Applicants' amendment, are presented below.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 3-7, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hämmerling et al.

Regarding claim 1, Hämmerling et al disclose an adaptor (Figure 1) comprising a body (e.g. plates 2 and 3, posts 9, and tubes 33) with two sets of apertures (24, 30) at

either end of the body, remote from each other, and channels (33) within the body connecting the sets of apertures, wherein at least one of the channels is curved. (Figure 1; Column 3, lines 1-6)

No particular weight is given to the limitation "for transferring multiple fluid sample from a first set of receptacles to a second set of receptacles", as this corresponds to intended use of the adaptor. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation")

Regarding claims 3 and 4, Hämmerling et al disclose a receiving lip coupled to the second end of the body, with the second set of apertures disposed in the lip. (Plate 2 can be called a receiving lip)

Regarding claims 5-7 and 29, Hämmerling et al disclose curved outer channels (Figure 1, e.g. leftmost channel 33), curved channels located toward a middle portion of the body (e.g. 3rd channel 33 from the left), outer channels bending inwardly (e.g. leftmost channel 33 as it approaches plate 3 - this direction is not precluded by the

claim language), and middle channels bending outwardly. (e.g. 3rd channel 33 from the left as it approaches plate 2)

7. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al.

Regarding claim 1, Lewis et al disclose an adaptor (Figure 4) comprising a body (58 and 60) with two sets of apertures at either end of the body, remote from each other, and channels within the body connecting the sets of apertures, wherein at least one of the channels is curved.

Regarding claim 2, Lewis et al disclose an adaptor made from plastic. (Column 6, lines 21-40)

Regarding claims 3 and 4, either end can be called a receiving lip, since they protrude from the other portion of the body, and receive the tubing as disclosed at Column 8, line 67 - Column 9, line 3.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Grenner.

Regarding claim 1, Grenner discloses an adaptor (Figures 1-3) comprising a body (e.g. plate 14 with sealing by 12 and 22) with two sets of apertures at either end of the body, remote from each other (Figure 2), and channels (16) within the body connecting the sets of apertures, wherein at least one of the channels is curved. (Figure 3, Column 6, lines 20-33)

Again, no particular weight is given to the limitation "for transferring multiple fluid sample from a first set of receptacles to a second set of receptacles", for the same reasons given above.

Regarding claim 2, Grenner discloses the device being constructed of plastic. (Column 5, lines 39-45)

Regarding claims 3 and 4, Grenner discloses a receiving lip coupled to the second end of the body, with the second set of apertures disposed in the lip. For example, in Figure 1, since the right end is narrower than the left end, this end can be called a "lip". Since the sample is filtered through 12 for introduction to the device, this end also "receives" the filtered sample.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-7 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al in view of Sugiyama. This rejection involves a different interpretation of Lewis et al than that given above.

Regarding claim 1, Lewis et al disclose an adaptor (Figures 1 and 2, transfer set 34) comprising a body (e.g. tray 38) with a set of apertures at one end of the body, remote from the other end (Adaptor 56), and channels (16) within the body connecting this set of apertures with means for holding the tubes 16 apart and directing them to

fluid reservoirs (Column 6, lines 34-40), wherein at least one of the channels is curved. (Figure 2)

Regarding claim 2, Lewis et al disclose the adaptor being made of plastic. (Column 6, lines 21-40)

Regarding claims 3 and 4, the protrusion of adaptor 56 can be called a receiving lip, since it protrudes from the body, and receives the tubing as disclosed at Column 8, line 67 - Column 9, line 3. (Also, Figures 2 and 4)

Regarding claims 5-7 and 29, Lewis et al disclose curved outer channels (Figure 2, e.g. rightmost channels 16 exiting tray 38), curved channels located toward a middle portion of the body (leftmost channels 16 exiting tray 38), outer channels bending inwardly (From coupler 42 to adaptor 56), and middle channels bending outwardly. (Figure 2, leftmost channels 16)

Lewis et al do not explicitly disclose that the means for holding and organizing tubes 16 comprises a second set of apertures in tray 34.

Sugiyama discloses retaining of pipes in spaced, organized fashion by directing each pipe through an individual aperture in a clamp body (Figure 1; Summary section)

Lewis et al and Sugiyama are analogous art in that both are concerned with the problem of securing pipes or tubes in an organized fashion.

It would have been obvious to one having ordinary skill in the art to modify the system of Lewis et al by providing individual apertures in the second end of tray 38 (i.e. left of coupler 42 in Figure 2) to secure each tube as it exits the adaptor, as taught by Sugiyama, because Sugiyama teaches that it provides a secure means of holding tubes

in a desired position (Abstract) and Lewis et al disclose the need for such securement means within their system (Column 6, lines 34-40), although they do not discuss any particular suitable means.

11. Claims 1-4, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gombocz et al in view of Hämmerling et al.

Relevant to claim 1, Gombocz et al disclose an adaptor (Figure 6, 150) useful for transferring multiple fluid samples (162) to a second set of receptacles (126), comprising: a body (152), said body defining a first set of apertures (154; Figure 7), a second set of apertures (below 158), and channels within the body (158) connecting the two sets of apertures.

Relevant to claim 3, Gombocz et al disclose an adaptor further comprising a lip coupled to the second end of the body (Narrow section with passage 158), with the second set of apertures disposed in the lip.

Relevant to claim 4, Gombocz et al disclose one receiving lip coupled to the second end of the body. (Narrow section with passage 158)

Relevant to claim 8, Gombocz et al disclose a means coupled to the body for stabilizing and aligning the body over the horizontal gel. (Gel plate 100, itself)

Relevant to claim 9, Gombocz et al disclose the gel plate (base) having a body with a back (opposite the gel-bearing surface), two sides (left and right edges), and two horizontal support members (116 and 116a run horizontally across the back)

Relevant to claim 10, Gombocz et al disclose angled ledges extending downwards and outwards from said back, comprising grooves. (116 and 116a) No particular weight is given to the recitation of intended use, "for slidably guiding said body".

Gombocz et al do not explicitly disclose curved channels in the body, nor do they disclose forming the adaptor from plastic.

Hämmerling et al disclose an adaptor with curved channels for transferring samples from a carrier with one orientation to carriers having a different orientation.

Specific to claim 2, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the adaptor of Gombocz et al from plastic, because molding this shape would be the easiest and least expensive way of producing it, and using plastic would prevent short-circuiting of the device.

Additionally, it would have been obvious to one having ordinary skill in the art to modify the adaptor of Gombocz et al to provide curved channels, as taught by Hämmerling et al, because the particular shape of an adapter is a matter of design choice within the abilities of a skilled artisan. For instance, if a particularly dilute sample required a large reservoir volume, it would have been obvious to a skilled artisan, in choosing the design of the adaptor, to choose to laterally widen each reservoir. (i.e. in the direction perpendicular to the paper in Figure 6) This would require a narrowing of the adaptor width from top to bottom, and Hämmerling et al teach that use of curved channels is a useful way of addressing such changes in configuration from the inlet to the outlet of an adaptor.

Furthermore, in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), the court held that the configuration of the claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

12. Claims 1, 3, 4, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Hämmerling et al.

Relevant to claim 1, Nguyen et al disclose an adaptor (Figures 1 and 2) useful for transferring multiple fluid samples from a first set of receptacles to a second set of receptacles (wells in gel), comprising: a body (11), said body defining a first set of apertures (Top surface of 11, between partitions 17), a second set of apertures (Bottom surface of 11, between partitions 17), and channels within the body connecting the two sets of apertures.

Relevant to claim 3, Nguyen et al disclose an adaptor further comprising a lip coupled to the second end of the body (24, notch 26), with the second set of apertures disposed in the lip.

Relevant to claim 4, Nguyen et al disclose one receiving lip coupled to the second end of the body. (24, notch 26)

Relevant to claim 8, Nguyen et al disclose a means coupled to the body for stabilizing and aligning the body over the horizontal gel. (Gel enclosure 12)

Nguyen et al do not explicitly disclose curved channels in the body.

Hämmerling et al disclose an adaptor with curved channels for transferring samples from a carrier with one orientation to carriers having a different orientation.

It would have been obvious to one having ordinary skill in the art to modify the adaptor of Nguyen et al to provide curved channels, as taught by Hämmerling et al, because the particular shape of an adapter is a design choice within the abilities of a skilled artisan. In the case that the well spacing of the gel is wider or narrower than the spacing of a multichannel pipetter ("suitable injection device" - Column 3, lines 34-36; such pipetters are familiar to and commonly preferred by skilled artisans), it would be obvious to provide different spacings at the adaptor inlets and outlets to accommodate this difference. Hämmerling et al teach that use of curved channels is a useful way of addressing such changes in configuration from the inlet to the outlet of an adaptor.

Furthermore, in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), the court held that the configuration of the claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

13. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Hämmerling et al and Sarrine et al. (U.S. 4,827,780)

Nguyen et al disclose an assembly (Figures 1 and 2) useful for transferring multiple fluid samples from a first set of receptacles to a second set of receptacles (wells in gel), comprising: a body (11), said body defining a first set of apertures (Top surface of 11, between partitions 17), a second set of apertures (Bottom surface of 11,

between partitions 17), and channels within the body connecting the two sets of apertures. Nguyen et al also disclose their device to be useful in guiding syringe needles to wells in the gel. (i.e. threading the needles through the channels; Title, summary sections)

Relevant to claims 12 and 13, Nguyen et al disclose the second receptacles being wells in an electrophoresis gel. (Abstract)

Relevant to claim 15, Nguyen et al disclose a base coupled to the body for stabilizing and aligning the body over a vertical gel. (Gel enclosure 12)

Nguyen et al do not explicitly disclose curved channels, or the assembly further comprising gel-loading pipette tips threaded through the channels.

Sarrine et al disclose a multi-channel, automatic pipettor suitable for applying samples to an electrophoresis gel. (See Background section) This pipettor dispenses fluids through tips (Figure 7; 93) that can be positioned automatically.

It would have been obvious to on having ordinary skill in the art to modify the assembly of Nguyen et al by using the automatic pipettor of Sarrine et al to dispense the samples to the chambers, because it would simplify the analysis of a series of samples through increased automation, and Sarrine et al specifically suggest using their pipettor in loading electrophoresis gels. (Background section; Figure 2)

Regarding the limitation to bendable pipette tips, any commonly used pipette tip material (e.g. plastic, metal, glass) is bendable to some degree.

It would also have been obvious to modify the adaptor of Nguyen et al to comprise curved channels, as taught by Hämmerling et al, as discussed above in paragraph 12.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-4 and 8-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,231,813 in view of Nguyen et al and Hämmerling et al.

Claim 1 of U.S. Patent No. 6,231,813 claims an adaptor useful for transferring multiple fluid samples from a first set of receptacles to a second set of receptacles, comprising: a body, said body defining a first set of apertures at one end of said body, said first set of apertures spaced apart by a first spacing, a second set of apertures at a second end of said body remote from said first end, said second set of apertures

spaced apart by a second spacing, wherein said second spacing is different than said first spacing, and channels within said body connecting said first set of apertures with said second set of apertures.

Claims 2, 8, and 9 of the instant application is exactly the same as claims 2, 7, and 8 of U.S. Patent No. 6,231,813.

Claims 3 and 4 of the instant application provide no limitations patently distinguishable from claims 3 and 4 of U.S. Patent No. 6,231,813. The functions of the lips would be entirely equivalent.

Claim 10 of the instant application recites the same limitations with the same functions as those listed in claim 9 of U.S. Patent No. 6,231,813.

Claim 1 of U.S. Patent No. 6,231,813 does not allow for the first spacing to equal the second spacing.

Nguyen et al disclose an adaptor useful for transferring fluids from one set of receptacles to another, with similar design and construction, in which the first spacing and the second spacing are equal.

It would have been obvious to modify the spacer of Claim 1 of U.S. Patent No. 6,231,813 by providing equal spacing to the first set of apertures and second set of apertures, as taught by Nguyen et al, because it would allow convenient sample loading in cases where the well spacing in the gel was the same as the well spacing on a standard microtiter plate. (i.e. 9 mm)

The obviousness of providing curved channels was argued above in paragraph 12.

16. Claims 11-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-13 of U.S. Patent No. 6,231,813 in view of Nguyen et al and Hämmerling et al.

Claim 10 of U.S. Patent No. 6,231,813 is equivalent to instant claim 11, except that it does not specify curved channels or bendable pipette tips, and does not allow for equal spacing of the first and second sets of apertures.

Claim 11 of U.S. Patent No. 6,231,813 claims the same destination for the fluid transfer as Claim 12 of the instant application.

Claims 12 and 13 of U.S. Patent No. 6,231,813 are identical to claims 13 and 14 of the instant application.

Nguyen et al disclose an adaptor useful for transferring fluids from one set of receptacles to another, with similar design and construction, in which the first spacing and the second spacing are equal.

It would have been obvious to modify the assembly of Claim 10 of U.S. Patent No. 6,231,813 by providing equal spacing to the first set of apertures and second set of apertures, as taught by Nguyen et al, because it would allow convenient sample loading in cases where the well spacing in the gel was the same as the well spacing on a standard microtiter plate. (i.e. 9 mm)

Any commonly used pipette tip is inherently bendable to some degree.

The obviousness of providing curved channels was argued above in paragraph 12.

17. Claims 15 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14 and 15 of U.S. Patent No. 6,231,813 in view of Nguyen et al and Hämmerling et al.

Claim 14 of U.S. Patent No. 6,231,813 is equivalent to instant claim 15, except that it does not specify curved channels or bendable pipette tips, and does not allow for equal spacing of the first and second sets of apertures.

Claim 15 of U.S. Patent No. 6,231,813 is identical to claim 16 of the instant application.

Nguyen et al disclose an adaptor useful for transferring fluids from one set of receptacles to another, with similar design and construction, in which the first spacing and the second spacing are equal.

It would have been obvious to modify the spacer of Claim 14 of U.S. Patent No. 6,231,813 by providing equal spacing to the first set of apertures and second set of apertures, as taught by Nguyen et al, because it would allow convenient sample loading in cases where the well spacing in the gel was the same as the well spacing on a standard microtiter plate. (i.e. 9 mm)

Any commonly used pipette tip is inherently bendable to some degree.

The obviousness of providing curved channels was argued above in paragraph 12.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey Barton, whose telephone number is (571) 272-1307. The examiner can normally be reached Monday-Friday from 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached at (571) 272-1342. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

JTB
March 7, 2005

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